

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

Claim 1 (currently amended). A configuration, comprising:

[[a]] at least one first device;

a cross bar;

[[a]] at least one second device connected to said at least one first device through said cross bar, said at least one first device accessing said at least one second device through said cross bar to at least one of read data from said at least one second device and write data to said at least one second device;

a multiplexer associated with each of said at least one first device, said multiplexer associated with each of said at least one first device having input connections connecting to all of said at least one second device and an output connection connecting to the respective one of said at least one first device;

an arbiter associated with each of said at least one second device, said arbiter having input connections connecting to all of said at least one first device and an output connection connecting to the respective one of said at least one second device; and

a multiplexer associated with each of said at least one second device, said multiplexer associated with each of said at least one second device having input connections connecting to all of said at least one first device and an output connection connecting to the respective one of said at least one second device.

~~upon the occurrence of a read access to said second device, said first device reading the data emitted from said second device upon receipt of a ready signal produced by said second device and supplied to said first device through said cross bar; and~~

~~upon the occurrence of a write access from said first device to said second device;~~

~~said first device emitting the data to be written to said second device upon receipt by said first device of a~~

~~ready signal produced by said second device and supplied  
to said first device through said cross bar, and~~

~~said second device reading the data emitted from said  
first device upon receipt by said second device of a data  
valid signal produced by said first device and supplied  
to said second device through said cross bar.~~

Claim 2 (currently amended). The configuration according to  
claim 1, further comprising:

[[a]] at least one first address bus;

[[a]] at least one second address bus;

[[a]] at least one first read data bus;

[[a]] at least one second read data bus;

[[a]] at least one first write data bus;

[[a]] at least one second write data bus;

each of said at least one first device and said cross bar  
being connected to one another through a respective one of

said at least one first address bus, a respective one of said  
at least one first read data bus, and a respective one of said  
at least one first write data bus; and

each of said at least one second device and said cross bar  
being connected to one another through a respective one of  
said at least one second address bus, a respective one of said  
at least one second read data bus, and a respective one of  
said at least one second write data bus.

Claim 3 (currently amended). The configuration according to  
claim 2, wherein one of said at least one first device sends a  
request signal to said cross bar when said first device wishes  
to make a read access to one of said at least one second  
device.

Claim 4 (currently amended). The configuration according to  
claim 3, wherein said first device sends an address to said  
cross bar at the same time as the request signal, said address  
specifying a second device and a point within said second  
device from which data should be read.

Claim 5 (cancelled).

Claim 6 (currently amended). The configuration according to claim 4, wherein said first device transmits the request signal and the address to said cross bar through ~~said a~~ respective first address bus.

Claim 7 (original). The configuration according to claim 3, wherein said cross bar confirms the read access request by transmission of a grant signal to said first device.

Claim 8 (currently amended). The configuration according to claim 7, wherein said cross bar transmits the grant signal to said first device through ~~said a~~ respective first address bus.

Claim 9 (currently amended). The configuration according to claim 4, wherein said cross bar passes on at least a portion of the address supplied to said cross bar through ~~said a~~ respective second address bus to said second device from which data should be read.

Claim 10 (original). The configuration according to claim 9, wherein said second device emits to said cross bar the data stored at the address supplied to said second device.

Claim 11 (original). The configuration according to claim 10, wherein said second device emits the ready signal to said

cross bar at the same time that said second device emits the data that has been read.

Claim 12 (currently amended). The configuration according to claim 11, wherein said second device transmits the data that has been read and the ready signal to said cross bar through said a respective second read data bus.

Claim 13 (currently amended). The configuration according to claim 12, wherein said cross bar passes on the data supplied thereto and the ready signal supplied thereto through said a respective first read data bus to said first device.

Claim 14 (currently amended). The configuration according to claim 2, wherein one of said at least one first device sends a request signal to said cross bar when said first device wishes to make a write access to one of said at least one second device.

Claim 15 (currently amended). The configuration according to claim 14, wherein said first device sends an address to said cross bar at the same time as the request signal, the address specifying a second device and a point within said second device to which data should be written.

Claim 16 (currently amended). The configuration according to claim 15, wherein said first device transmits the request signal and the address to said cross bar through ~~said~~ a respective first address bus.

Claim 17 (original). The configuration according to claim 14, wherein said cross bar confirms the write access request from said first device by transmitting a grant signal to said first device.

Claim 18 (currently amended). The configuration according to claim 17, wherein said cross bar transmits the grant signal to said first device through ~~[[said]]~~ a respective first address bus.

Claim 19 (currently amended). The configuration according to claim 15, wherein said cross bar passes on at least a portion of the address supplied to said cross bar through ~~said~~ a respective second address bus to said second device to which data should be written.

Claim 20 (original). The configuration according to claim 19, wherein said second device emits a ready signal to said cross bar when said second device is ready to receive the data to be stored in said second device.

Claim 21 (currently amended). The configuration according to claim 20, wherein said second device transmits the ready signal to said cross bar through ~~said~~ a respective second read data bus.

Claim 22 (currently amended). The configuration according to claim 21, wherein said cross bar passes on the ready signal to said first device through ~~said~~ a respective first read data bus.

Claim 23 (original). The configuration according to claim 22, wherein said first device emits to said cross bar the data to be written to said second device.

Claim 24 (original). The configuration according to claim 23, wherein said first device emits the data valid signal to said cross bar at the same time that said first device emits the data to be written to said second device.

Claim 25 (currently amended). The configuration according to claim 24, wherein ~~said~~ a respective first write data bus transmits the data emitted from said first device and the data valid signal emitted from said first device to said cross bar.



Claim 26 (currently amended). The configuration according to claim 25, wherein said cross bar passes on the data and the data valid signal supplied to said cross bar to said second device through ~~said~~ a respective second write data bus.

Claim 27 (currently amended). A method for at least one of reading and writing data, which comprises:

connecting [[a]] at least one second device to [[a]] at least one first device through a cross bar;

accessing one of the at least one the second device with one of the at least one ~~the~~ first device through the cross bar for at least one of reading and writing data;

associating a multiplexer with each of the at least one first device, the multiplexer associated with each of the at least one first device having input connections connecting to all of the at least one second device and an output connection connecting to the respective one of the at least one first device;

associating an arbiter with each of the at least one second device, the arbiter having input connections connecting to all of the at least one first device and an output connection

connecting to the respective one of the at least one second device;

associating a multiplexer with each of the at least one second device, the multiplexer associated with each of the at least one second device having input connections connecting to all of the at least one first device and an output connection connecting to the respective one of the at least one second device;

when a read access to the second device occurs, reading the data emitted from the second device with the first device when the first device receives a ready signal produced by the second device and supplied to the first device through the cross bar; and

when a write access from the first device to the second device occurs:

emitting, from the first device, the data to be written to the second device when the first device receives a ready signal produced by the second device and supplied to the first device through the cross bar; and

reading the data emitted from the first device with the second device when the second device receives a data valid signal produced by the first device and supplied to the second device through the cross bar.

Claim 28 (cancelled).